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10/571,261

04/13/2006

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EXAMINER

KOSACK, JOSEPH R

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

03/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/571,261 | <b>Applicant(s)</b><br>BONRATH ET AL. |  |
|                              | <b>Examiner</b><br>Joseph R. Kosack  | <b>Art Unit</b><br>1626               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1,2,6-15,18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

The Applicant has traversed the rejection by amending the claims 7, but has not addressed the merits of the rejection. However, the Applicant did not delete all of the non-enabled subject matter, as only one particular catalyst has been shown to be enabled. As the Examiner stated in the previous action, there is a serious doubt as to whether any cross-metathesis catalyst will work, let alone any of formulae VIIa and VIIb

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with the after filing teachings by the Applicant. Therefore, the rejection is maintained except for those claims expressly cancelled by the Applicant.

***Previous Claim Rejections - 35 USC § 103***

Claims 18 and 19 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Imfeld (USPN 4,689,427).

The Applicant has traversed the rejection on the grounds that Imfeld does not disclose or suggest the Applicant's structure while Imfeld was under an obligation to supply the best mode. Additionally, the Applicant argues that the person of ordinary skill in the art would only practice the best mode set forth by Imfeld.

The Examiner respectfully disagrees. Imfeld teaches to be the R group to be a hydroxyl protecting group, which is what the Applicant's alkanoyloxy compounds are. Therefore, Imfeld suggests in his best mode the instantly claimed compounds. The rejection is maintained.

***Previous Double Patenting Rejections***

Claims 18 and 19 were previously provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 18 and 19 of copending Application No. 10/571,252.

The Applicant traverses the rejection on the grounds that a terminal disclaimer may be submitted or the conflicting claims in the '252 application may be cancelled upon an indication of allowable subject matter. The Applicant also traversed that the requirement of submission of a terminal disclaimer prior to an indication that the claims are otherwise allowable would constitute an undue burden on the Applicants.

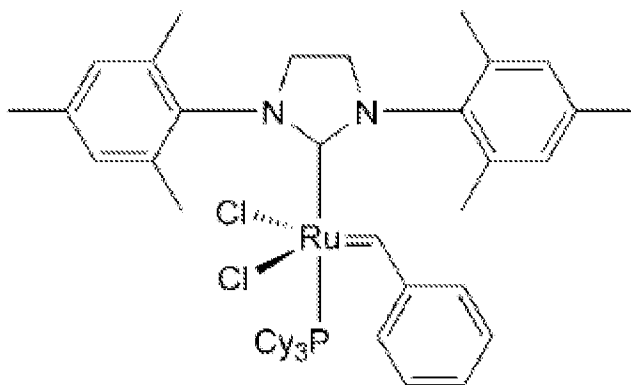
The policy of the United States Patent and Trademark Office is that a provisional obviousness double patenting rejection will only be held in abeyance if the provisional rejection is the only rejection on the claims and if the instant application is the earlier filed application. As the provisional rejection is not the only rejection in the instant application and no terminal disclaimer has been filed, the rejection is maintained.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, and 6-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for making compounds of Formula III with



**4a** (Cy = cyclohexyl)

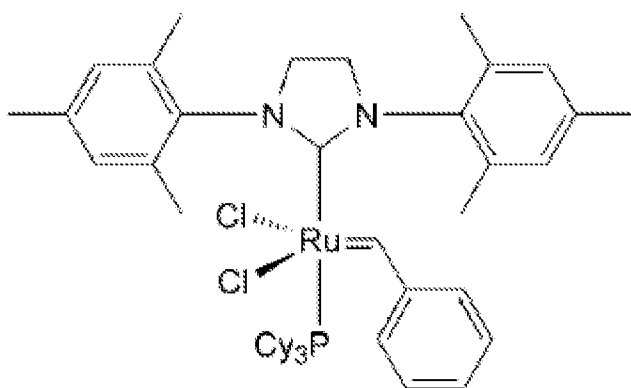
, does not reasonably provide

enablement for the process with any other cross-metathesis catalyst. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

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The nature and scope of the invention is a process for making compounds of Formula III, and subsequently Formula V, comprising the step of reacting a compound of Formula I with a compound of Formula II with a cross-metathesis catalyst. The cross-metathesis catalyst is defined in dependent claims to be a ruthenium catalyst, more narrowly as a catalyst of formulae VIIa, VIIb, or VIIc, and most narrowly as a catalyst of formula VIII.

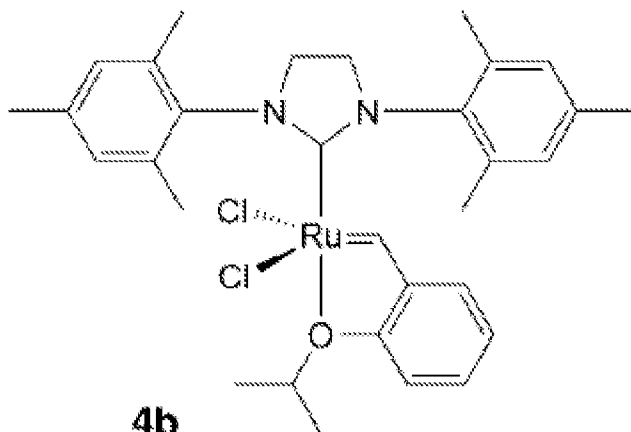
The working examples presented in the disclosure are all drawn to the process where the catalyst is a compounds of Formula VIII. However, Applicant's own work which was published post-filing date (Malaise et al., *Helvetica Chimica Acta*, 2006, 797-812) only shows the process working with the catalyst being



**4a** (Cy = cyclohexyl)

. An attempt was made to use the

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related catalyst

with no success at

making the final product of Formula III. See pages 802-804, especially Scheme 5 and Table 2, entry 13. It is also noted that Formula VIII covers more than cyclohexyl groups attached to the phosphorus ring, but also include any 6 membered hydrocarbon with one degree of unsaturation (propylcyclopropyl, 3-hexene, etc...) Therefore, there is serious doubt that the process as claimed would work with any cross-metathesis catalyst, leading one of skill in the art to engage in undue experimentation in order to practice the full scope of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

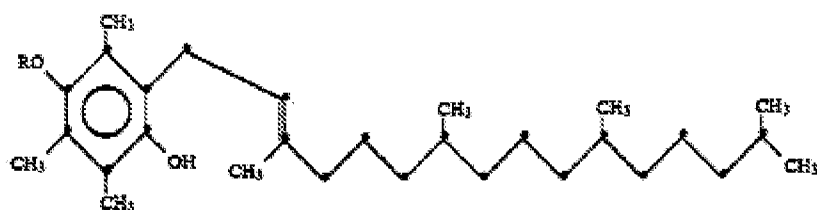
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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imfeld (USPN 4,689,427).

Imfeld teaches compounds of the formula:



, where R is a hydroxy

protecting group.

Imfeld does not teach specifically a C<sub>2-5</sub> or C<sub>3-5</sub> alkanoyloxy for the R<sub>3</sub> or R<sub>20</sub> positions of formulae IV and X.

One of ordinary skill in the art uses esters, namely alkyl and benzyl esters, to protect hydroxyl groups in organic synthesis on a routine basis. Therefore, one of



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ordinary skill with the benefit of the disclosure of Imfeld would generate C<sub>2-5</sub>alkanoyloxy groups in order to act as the hydroxyl protecting group taught by Imfeld with a reasonable expectation of success.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 18 and 19 of copending Application No. 10/571,252. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are drawn to the same art specific subject matter.

The ‘252 teaches essentially the same compounds as the instant claims but with using a different name for the variable (R1 and R24 instead of R3 and R20.)

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Conclusion***

Claims 1,2, 6-15, 18, and 19 are rejected. Claims 16 and 17 are currently found to be allowable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Kosack whose telephone number is (571)272-5575. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph R Kosack/  
Examiner, Art Unit 1626

/REI-TSANG SHIAO /  
Primary Examiner, Art Unit 1626